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WASHING HAND HABIT IN STUDENTS LIVING IN DORMITORIES TO PREVENT FECAL-ORAL DISEASES

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Students who live far from home are population at risk of fecal-oral disease related to personal hygiene. For example is outbreak of Hepatitis A that recently happened to students who mostly live in dormitories in Bogor, West Java. That case also can be occurred at Universitas Indonesia as one of the universities with students from various regions and mostly live in a dorm. The easiest practice of personal hygiene that sometimes being ignored is washing hands. Through descriptive study with 256 respondents, the writers want to describe about washing hands habit in students live in dormitories at Universitas Indonesia. Most respondents often wash their hands before eating (51.9%), and always wash their hands after eating (48.8%), or after using the rest room (63.0%). Most respondents often wash their hands using soap before eating (50.0%) or after eating (48.1%), and always wash their hands using soap after using the rest room (63.0%). Even though most respondents have a good habit of washing hands, there are some respondents who do not wash their hands after eating (0.6%) or after using the rest room (0.6%). Moreover, there are some respondents who do not wash their hands using soap before eating (1.9%), after eating (0.6%), and after using the rest room (1.2%). Most students wash their hands before eating, after eating or after using the rest room. But there are some students who do not wash their hands. It can be a serious problem because it can lead to several infectious diseases, especially fecal-oral diseases. For further research, it should be conducted a research that not only assesses the washing hand as a component of healthy lifestyle in student life, but also food consumption, sanitation, or restaurant hygiene.

Keywords: Washing Hand, Fecal-oral Diseases, Dormitory, Students

1. INTRODUCTION

Fecal-oral transmission means that the germs that cause illness are found in the feces of an infected person, then spread to another person. This occurs when a person touches the feces of an infected person or an object contaminated with that and ingests the germs (Oklahoma State Department of Health Acute Disease Service 2008). Food and drinking water are the examples of object which can be contaminated by feces.

Food contaminated by feces can causes disease usually called foodborne disease. People can get this disease not only because contaminated food but also contaminated hands. WHO has discovered that a large percentage of foodborne disease outbreaks are spread by contaminated hands. These diseases include diarrhea, hepatitis A, typhoid fever etc (CDC 2015; WHO 2015; Greenwell et al. 2013). Therefore, appropriate hand washing practices can reduce the risk of foodborne disease as fecal-oral disease.

Some research suggests that the practice of hand washing can prevent some of fecal-oral disease. WHO said that washing hands with soap and water could reduce diarrheal disease-associated deaths by up to 50% (WHO 2001). Researchers in London also mentioned that if everyone routinely washed their hands, a million deaths a year could be prevented (Curtis 2003).

Prevention of foodborne disease, especially which contaminated by feces is very important because the prevalence of this disease is still high in many countries. Around the world, estimated 600 million (almost 1 in 10 people in the world) fall ill after eating contaminated food. WHO said that 420.000 people die every year due to foodborne disease (WHO 2015). In Indonesia, the prevalence of foodborne disease remains high. Based on the results of basic health research or Riset Kesehatan Dasar (usually called Riskedas) in 2013, the prevalence of diarrhea was 3.5% and hepatitis A 19.3% (Ministry of Health Republic of Indonesia/Kementerian Kesehatan Republik Indonesia 2013).

Department of Health and Hospitals State of Louisiana mentioned that one of the population at risk of foodborne disease are those who live in the dormitory. One contributing factor is the hectic schedules that college students have to balance, so that food safety can fall by the wayside (<http://dhh.louisiana.gov/>). In addition, students who live in dormitory and away from their parents should control and prepare all their needs by themselves, including their need to eat and prepare food. Students must adapt to those conditions that make them difficult to practice personal hygiene properly, as simple as hand washing practices.

In Indonesia, there is a recent outbreak of hepatitis A among students in Bogor region. Most of the victims are students living in dormitory (Ministry of Health Republic of Indonesia 2015). The risk may also occur at students living in dormitory at other universities in Indonesia, including Universitas Indonesia.

Universitas Indonesia is a university which has thousand number of students from all over regions in Indonesia. Thus, Universitas Indonesia provides dormitory facility with capacity of 1,225 rooms for students who come from outside the region and main island (Java Island). With a large capacity, the average number of boarders each year nearly meet the capacity provided. With the fact that susceptible population in foodborne disease (especially fecal-oral route) is quite large, the researchers want to know the description of hand washing practices in students who live in dormitory in Universitas Indonesia.

2. MATERIAL AND METHOD

This study conduct a descriptive research that focused on public health mainly health promotion in campus. This study describes about primary clean lifestyle, washing hand habit in students that lives in dormitories at Universitas Indonesia. This study uses validated questionnaires and has sample of 256 respondents. The respondents are active students that come from 13 faculties in Universitas Indonesia. Respondents are students that consist of various region and culture background.

Data that obtained from respondents are processed by analysis data software, SPSS for windows version 20.0. This data process is required to know frequencies and distribution data. The result is featured in chart and percentage to get the argument based on logical thinking. Moreover, we try to make a correlation with previous study from journals, scientific articles, and other online source to support our study.

3. RESULT

After collecting data from 163 respondents, the data (figure 1) shows that most respondents often wash their hands before eating (51.9%), and always wash their hands after eating (48.8%), or after using the rest room (63.0%). Even though most respondents have a good habit of washing hand, there are some respondents who do not wash their hands after eating (0.6%) or after using the rest room (0.6%).

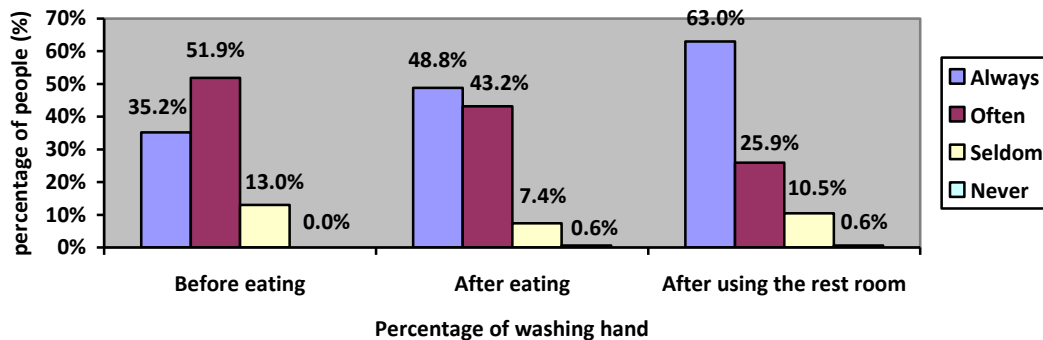


Figure 1: percentage of washing hand in students who live in dormitory

As shown in figure 2, Most respondents often wash their hands using soap before eating (50.0%) or after eating (48.1%), and always wash their hands using soap after using the rest room (63.0%). Therefore, there are some respondents who do not wash their hands using soap before eating (1.9%), after eating (0.6%), and after using the rest room (1.2%).

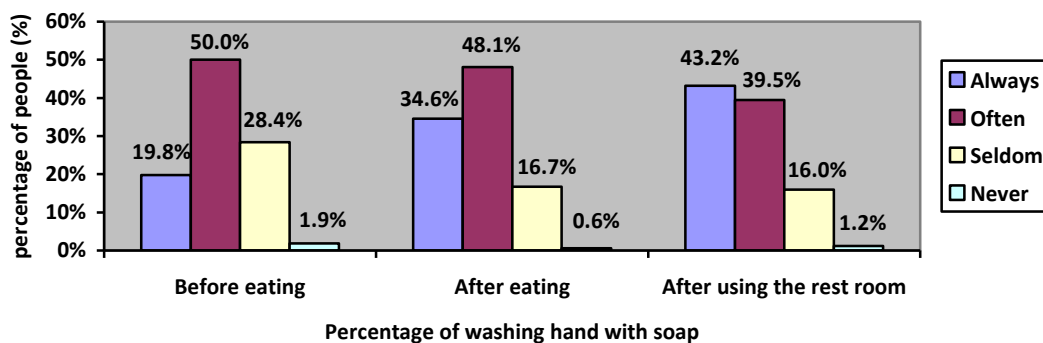


Figure 2: percentage of washing hand with soap in students who live in dormitory

4. DISCUSSION

Hand washing is a primary clean life style that has strong correlation with healthy condition. From figure 1 and 2, most students proven to concern washing hand with or without soap before eating, after eating, and after using rest room. This result is consistent with previous study conducted by Miko et al. (2012) that certain personal hygiene behaviors appeared to be universally strong among study participants, with the vast majority of respondents stating that they wash their hands “always” or “most of the time” after using the toilet. Despite the good washing hand habit among most respondents, some respondents do not wash their hands before eating, after eating, and after using rest room. This can lead to several infectious diseases that connected to fecal-oral

transmitted. Research conducted by Moe et al. (2001) shows that deficiencies in hand hygiene have been associated with outbreaks of viral gastroenteritis.

There are so many ways of germ to contaminate hand, a single gram of human feces can contain one trillion germs (Frank 1998). Feces from people or animals is an important source of germs like Salmonella, E. coli O157, and norovirus that cause diarrhea, and it can spread some respiratory infections like adenovirus and hand-foot-mouth disease (CDC 2015). When these germs get onto hands and are not washed off, they can be passed from person to person and make people sick. Washing hands with soap removes germs much more effectively (Burton 2011).

Diarrheal is one of diseases that caused by poor hygienic practices like hand washing. Eighty-eight percent of diarrhea cases worldwide are linked to unsafe water, inadequate sanitation or insufficient hygiene. These cases result in 1.5 million deaths each year, mostly in young children. It is estimated that washing hands with soap and water could reduce diarrheal disease-associated deaths by up to 50% (WHO 2001). Researchers in London estimate that if everyone routinely washed their hands, a million deaths a year could be prevented (Curtis and Camicross 2003). Besides that, a large percentage of foodborne disease outbreaks are spread by contaminated hands. Appropriate hand washing practices can reduce the risk of foodborne illness and other infections. Handwashing also can reduce the risk of respiratory infections by 16% (Rabie and Curtis 2006).

Providing access to safe water and sanitation facilities, and promoting proper hygiene behavior are important in reducing the burden of disease from sanitation and hygiene-related disease. Some of another disease that related to inadequate sanitation and hygiene, such as lice, lymphatic filariasis, ringworm, scabies, soil transmitted helminthiasis and trachoma (CDC 2012).

For further research, it should be conducted a research that not only assesses the washing hand as a component of healthy lifestyle in student life, but also food consumption, sanitation, or restaurant hygiene.

5. CONCLUSIONS

From this study, it can be conclude that most of respondent have good habit of washing hands. But, there are some respondents who do not wash their hands using soap before eating (1.9%) and after using the rest room (1.2%). Moreover, some of respondents do not wash their hands after using the rest room (0.6%). So, there are students who are at high risk of infectious diseases especially fecal-oral disease. Because of that, health promotion of personal hygiene especially washing hands habit is needed. For further research, it should be conducted a research that not only assesses the washing hand as a component of healthy lifestyle in student life, but also food consumption, sanitation, or restaurant hygiene.

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